

Application No. 10/077,578

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-35 (Cancelled).

36. (Currently Amended) A device for processing webs of material, comprising:

a machine frame,

an anvil roller mounted for rotation on the machine frame, and

one of a cutting tool and an embossing tool mounted for rotation on the machine frame

about an axis of rotation, wherein:

the tool has one of a cutting and embossing structure disposed on an outer sleeve thereof, said structure cooperating with anvil surfaces of the anvil roller,

the outer sleeve includes at least one end face on which a pressure force is applied to provide tension along an inner section of the tool, said inner section having bearing ends extending therefrom beyond the outer sleeve.

the tool rotates via bearings ~~associated with~~ carried on said bearing ends beyond the outer sleeve and independent of said end face, and

said pressure force is applied essentially parallel to said axis of rotation to reduce a maximum oscillation amplitude of the tool transverse to said axis of rotation during one of a cutting and embossing procedure.

37. (Cancelled).

38. (Cancelled).

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39. (Previously Presented) The device for processing webs of material as defined in claim 36, wherein the tool is a cutting tool and said inner section comprises an inner core, wherein the outer sleeve and inner core are braced against one another by the tension provided by said pressure force.

40. (Previously Presented) The device for processing webs of material as defined in claim 39, wherein said core and outer sleeve are braced such that the core is subject to a tensile load in the direction of the outer sleeve.

41. (Previously Presented) The device for processing webs of material as defined in claim 39, wherein said core and outer sleeve are braced such that pressure forces on the cutting tool are adapted to be overcompensated by means of the tensile stress on the core.

42. (Previously Presented) The device for processing webs of material as defined in claim 39, wherein said outer sleeve and core are braced by means of form-locking connections.

43. (Previously Presented) The device for processing webs of material as defined in claim 42, wherein a connection direction of a form-locking connection is oriented parallel to the axis of rotation of the cutting tool.

44. (Previously Presented) The device for processing webs of material as defined in claim 42, wherein a plurality of form-locking connections are arranged around the axis of rotation uniformly in relation to it.

45. (Previously Presented) The device for processing webs of material as defined in claim 42, wherein a form-locking element has a contact surface, a pressure being exertable on the outer sleeve by means of said contact surface.

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46. (Previously Presented) The device for processing webs of material as defined in claim 45, wherein a screw element is seated on a contact element provided with the contact surface, a tensile force being exerable on the core by means of said screw element.

47. (Previously Presented) The device for processing webs of material as defined in claim 42, wherein the dimensions of a form-locking element and/or the number of form-locking elements are adapted to the diameter and the span of the cutting tool.

48. (Previously Presented) The device for processing webs of material as defined in claim 36, wherein the tool is a cutting tool provided with supporting rings, the cutting tool being supportable in relation to the anvil roller and/or vice versa by means of said supporting rings.

49. (Previously Presented) The device for processing webs of material as defined in claim 48, wherein the diameter of a supporting ring surface is adjustable for each supporting ring due to radial expansion of the supporting ring in the range below an elastic expansion limit of its material by means of an expansion device.

50. (Previously Presented) The device for processing webs of material as defined in claim 48, wherein the diameter of a supporting ring is adjustable by means of a form-locking element, a tensile stress being exerable on the inner section of the cutting tool in relation to the outer sleeve with said form-locking element.

51. (Previously Presented) The device for processing webs of material as defined in claim 49 wherein the cutting tool is adapted to receive said pressure force to provide said tension independently of the expansion of the supporting rings.

52. (Previously Presented) The device for processing webs of material as defined in claim 36, wherein the tool is a cutting tool and a device for providing said pressure force to the cutting tool

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is arranged on the machine frame, a tensile stress being exerable between oppositely located ends or end areas of the cutting tool by means of said device.

53. (Previously Presented) The device for processing webs of material as defined in claim 36, wherein said tool is a cutting tool rotatable about said axis of rotation and has a cutting edge adapted to be brought into cooperation with said anvil surfaces of said anvil roller, wherein:

the cutting tool is biased by a pressure force applied to at least one end face of the cutting tool to provide tension along the cutting tool essentially parallel to said axis of rotation, said tension reducing a maximum oscillation amplitude of the cutting tool transverse to said axis of rotation during a cutting procedure.

54. (Cancelled).

55. (Cancelled).

56. (Previously Presented) The device for processing webs of material as defined in claim 53, wherein the cutting edge is seated on said outer sleeve, and said inner section comprises an inner core, wherein outer sleeve and inner core are braced against one another by said tension.

57. (Previously Presented) The device for processing webs of material as defined in claim 56, wherein the inner core and outer sleeve are biased such that the inner core is subject to a tensile load in the direction of the outer sleeve.

58. (Previously Presented) The device for processing webs of material as defined in claim 56, wherein the inner core and outer sleeve are biased such that pressure forces on the cutting tool are adapted to be overcompensated by means of tensile stress on the inner core.

59. (Previously Presented) The device for processing webs of material as defined in claim 56, wherein the outer sleeve and inner core are biased by means of form-locking connections.

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60. (Previously Presented) The device for processing webs of material as defined in claim 59, wherein a connection direction of a form-locking connection is oriented parallel to the axis of rotation of the cutting tool.

61. (Previously Presented) The device for processing webs of material as defined in claim 59, wherein a plurality of form-locking connections are arranged uniformly around the axis of rotation.

62. (Previously Presented) The device for processing webs of material as defined in claim 59, wherein a form-locking element has a contact surface, a pressure force being exertable on the outer sleeve by means of said surface.

63. (Previously Presented) The device for processing webs of material as defined in claim 62, wherein a screw element is seated on a contact element provided with the contact surface, a tensile force being exertable on the inner core by means of said screw element.

64. (Previously Presented) The device for processing webs of material as defined in claim 59, wherein the dimensions of a form-locking element and/or the number of form-locking elements are adapted to the diameter and the span of the cutting tool.

65. (Previously Presented) The device for processing webs of material as defined in claim 53, wherein the cutting tool is provided with supporting rings, the cutting tool being supportable in relation to the anvil roller and/or vice versa by means of said rings.

66. (Previously Presented) The device for processing webs of material as defined in claim 65, wherein the diameter of a supporting ring surface is adjustable for each supporting ring due to radial expansion of the supporting ring in the range below an elastic expansion limit of its material by means of an expansion device.

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67. (Previously Presented) The device for processing webs of material as defined in claim 65, wherein the diameter of a supporting ring is adjustable by means of a form-locking element, a tensile stress being exertable on an inner section of the cutting tool in relation to an outer sleeve by means of said form-locking element.

68. (Previously Presented) The device for processing webs of material as defined in claim 66, wherein the cutting tool is adapted to be biased independently of the expansion of the supporting rings.

69. (Previously Presented) The device for processing webs of material as defined in claim 36 wherein:

said tool is an embossing tool mounted for rotation on the machine frame about an axis of rotation,

said embossing structure is disposed on said outer sleeve,

said embossing structure cooperates with anvil surfaces of the anvil roller, and

said pressure force is applied essentially parallel to said axis of rotation to reduce a maximum oscillation amplitude of the embossing tool transverse to said axis of rotation during an embossing procedure.

70. (Previously Presented) The device for processing webs of material as defined in claim 36 wherein:

said tool is an embossing tool rotatable about said axis of rotation.